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AUTHOR Kugel, Patricia M.
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ABSTRACT

This descriptive study investigated the numbers of unique and overlap titles in selected elementary schools which may influence resource-sharing decision making. A convenience sample of seven elementary schools in DeKalb County, Georgia, using the Follett Software Company's "Circulation Plus" system was used. Each school printed a shelf list including the title and call number/author of the 600.00 to 699.99 Dewey Decimal Classification section of the collection. The data were put into machine-readable form and manipulated so that the overlap and unique numbers of titles could be identified. Of the seven elementary library media center collections studied, there were 2,232 (67%) unique titles and 1,101 (33%) overlap titles in a sample of 3,333 book titles. Research by Merritt (1942), Altman (1972), McGrath and Simon (1972), and Doll (1983) shows that when 50% of the titles are unique, implications for resource sharing exist. This study showed the numbers of unique titles were large enough to indicate resource sharing feasibility. The instructions for data collection that were sent to each of the school media centers are appended. (3 tables, 23 references) (Author/MAB)

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OVERLAP AND UNIQUE TITLES IN SELECTED ELEMENTARY
SCHOOL MEDIA CENTERS AND IMPLICATIONS
FOR RESOURCE SHARING

by

PATRICIA M. KUGEL

A SCHOLARLY STUDY

Presented in Partial Fulfillment of Requirements
for the Degree of Specialist in Education in
Library Media Technology in the Department
of Curriculum and Instruction
in the College of Education
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Atlanta, Georgia

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ABSTRACT

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Purpose

This descriptive study investigated the numbers of unique and overlap titles in selected elementary schools which may influence resource-sharing decision making.

Methods and Procedures

A convenience sample of seven elementary schools in DeKalb County, Georgia, using the Follett Software Company's Circulation Plus system was used. Each school printed a shelf list including the title and call number/author of the 600.00 to 699.99 Dewey Decimal Classification section of the collection. The data were put into machine-readable form and manipulated so that the overlap and unique numbers of titles could be identified.

Results

Of the seven elementary library media center collections studied, there were 2,232 (67%) unique titles and 1,101 (33%) overlap titles in a sample of 3,333 book titles.

Conclusions

Research by Merritt (1942), Altman (1972), McGrath and Simon (1972), and Doll (1983) shows that when 50% of the title are unique, implications for resource sharing exist. This study showed the numbers of unique titles were large enough to indicate resource sharing feasibility.

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CHAPTER 1

INTRODUCTION

Background

The same goal should be shared by all library media specialists: to provide students with access to information. This requires a wide diversity and large quantity of resource materials reflecting the variance of human experience, expanding technologies, and information that reinforces learning by exposure to multiple media. The mission is to support the curriculum of the educational system, continually enhance access to information, and satisfy the learner.

The increasing amount of information available dictates that library media specialists rethink traditional services to students and teachers and ways to access and deliver information. The challenge of resource sharing is to enhance access to information outside the school. Resource sharing is unlikely to reduce library expenditures and to be achieved without real costs; however, cooperative activity between libraries can benefit library media programs by providing larger quantities and qualities of resources to patrons.

The limited resources of individual schools due to shrinking budgets and aging collections, coupled with expanding needs, have created a rationale for better use of existing resources. The desire of some library media specialists to bring new technology into the media center creates economic factors which promote automation at the expense of additions to in-house resources. Is it possible to provide a large variety of resources to support the curriculum, satisfy the learner, and allow the capabilities of emerging technologies into the library media center?

Resource sharing can help compensate for weak local collections. Sharing materials could facilitate the sharing of services, concerns, and expertise. Sharing could not only satisfy the needs of the curriculum but also provide a wide range of resources to the serious student's desire for information and to the teacher's search for professional support. Sharing could also expand professional relationships among librarians. Cooperative problem solving can assist in reducing professional isolation.

Resource sharing is a means to achieving the goal of giving students access to expanded resources. Tools which could be used in this sharing include couriers and telecommunications via computers and facsimilie machines. Current technology provides communication vehicles which could provide rapid delivery of information.

The guidelines for school library media programs, Information Power: Guidelines for School Library Media

Programs (American Association of School Librarians & Association for Educational Communications and Technology, 1988), in its mission statement says: "the mission of the library media program is to ensure that students and staff are effective users of ideas and information" (p. 1). The resources for becoming effective users of ideas and information must be available. Because of the relatively weak economic positions school libraries experience, school library media centers should share resources. Library media programs share the same goal. The hypothesis is that cooperative activity between libraries would significantly increase the quantity and quality of materials to improve user access to information.

Research by Nugent (1968), Altman (1972), Dingle-Cliff and Davis (1979), Davis and Shaw (1979), Doll (1983), and Browne (1986) indicates that there is title diversity in the collections of many types of libraries. Is there sufficient title diversity in elementary schools to support resource sharing and to expand the uses and capabilities of existing resources?

Statement of the Problem

The purpose of this study was to determine if the numbers of unique and overlap book titles in elementary library media center collections have implications for resource sharing. This study investigated a small portion

of elementary school collections currently using the automated system from the Follett Software Company, Circulation Plus. The 600.00 to 699.99 section of the Dewey Decimal Classification System was used. This section supports the elementary school curriculum as it contains topics such as technology, applied science, simple machines, health, the working world, and drug use. Specifically, the following questions were explored:

1. What is the existence of unique and overlap titles in the elementary library media center collections compared in this study?

2. Do the title variances in these elementary library media center collections imply that resource sharing is feasible?

Significance of the Study

This study compared elementary school collections in a selected Dewey category which contain monograph titles which support the elementary school curriculum. In addition, the electronic circulation system used provided a uniform method of collecting data for comparison. Other studies have focused primarily on a sample survey of shelf lists, card catalogs, or purchase orders for the investigation of collections. This study used automation to sample a Dewey section of print materials.

The research by Altman (1972), Doll (1983), Browne (1986), and others has implications for resource sharing.

However, resource sharing possibilities among elementary schools have not fully been studied or utilized. This study could provide information for consideration in regard to resource sharing by determining the numbers of unique and overlap titles to help schools within a school system. These numbers could aid in the determination of the best use of resources.

Limitations, Assumptions, and Delimitations

Delimitations of this study include the narrow range of the material sampled. The selected Dewey category, 600.00 to 699.99, was the section of the collection used in the study. Additional Dewey categories which contain materials of support were not studied. Audiovisual materials, periodicals, and other print and nonprint resources that would enhance curriculum support were not included. The materials studied were monographs only. There was no attempt to study materials other than those listed in the selected Dewey category produced by the Circulation Plus system.

The numbers and demographic selections of the elementary school collections chosen for the study were determined solely by usage of the Circulation Plus system. These particular DeKalb County, Georgia, sites had the capability of printing the title lists requested for the study. Neither card catalog nor shelf list samples were required.

It was assumed that the title entry for Circulation Plus was identical in each school using the system. The

exception to this identical entry form was use of articles such as the. It was also assumed that no titles in the collections were misclassified and that the library media centers used consistent cataloging rules. Titles in an alternate classification were not identified using this approach.

Causes for the numbers of unique and overlap titles were not examined. There was no attempt to analyze the selection policies that created the collections. Neither the average age of the collections nor the age variance of the materials were determined. The numbers of media specialists managing the collections over the life of the collection were not considered. Maintenance requirements and collection qualities were not identified.

Definition of Terms

The definitions which follow clarify the way certain terms were used in this study.

Circulation Plus is a software package dedicated as a utility for the management of circulation and inventory library functions.

Monograph is a single book written on a particular topic or branch of a subject.

Network is a group of libraries using some means for cooperative activity, usually achieved using computer technology.

Overlap describes the condition when the same title is found in the holdings of more than one library.

Resource sharing is cooperative activity which makes resources available to other libraries.

Union catalog is a catalog of the holdings of each library in a cooperative activity for resource sharing.

Unique is the incidence of a particular title in a collection when that title only is found.

CHAPTER 2

REVIEW OF THE LITERATURE

The literature on the numbers of unique and overlap titles among collections has been primarily concerned with academic libraries. Categories of the study objectives have been those seeking connections among libraries for resource sharing, centralized processing, and cooperative collection development feasibility.

An overlap study is research that seeks to describe the quantitative ways that library collections are alike and different. The review of the literature concerning collection overlap shows that objectives, methodology, and results vary. Diversity in these studies makes comparison difficult.

The degree of collection overlap has been found to be a consequence of the age, size, and type of library used in the investigation (Arms, 1973; Dingle-Cliff & Davis, 1979). The overlap increases as the size of the libraries studied increases. The overlap decreases with the age and type of library. Resource sharing depends on a large diversity of titles. Libraries of various types and ages are appropriate candidates for resource sharing.

Studies have indicated that percentages of unique titles of library holdings range from 50% to 86% (Potter, 1982). The numbers of unique titles suggest that each library could offer and gain something by cooperative resource sharing. The smallest library in a group of libraries can contribute to and benefit from resource sharing.

Potter (1982) divided overlap studies into four categories based on their objectives. The first category contains studies that seek connections among libraries with implications for union catalog. The second is composed of studies that look for commonality among library acquisitions to determine the feasibility of centralized processing. The third type of study involves cooperative collection development using the number of unique titles in each collection. The fourth category of overlap study is of research which leads to better understanding of the problems and results of collection overlap.

Implications for Resource Sharing

The first quantitative study of collection overlap was sponsored by the American Library Association and the Carnegie Commission in the late 1930s (Merritt, 1942). It surveyed union catalogs in the United States. Merritt sampled titles from the Library of Congress Union Catalog. One hundred cards were selected from each letter of the alphabet except "X." The first 100 cards in the middle

drawer of all the drawers containing the letter in the catalog were selected as the location of the sample. He compared the cards in 129 libraries and found what was considered to be a large amount of overlap in 46 research libraries. However, he expected the numbers of unique titles to be greater, especially in the research libraries.

It has not been manageable to compare all of each collection. Merritt (1942) might have found a smaller overlap among the research libraries if every title could have been used in the study. Partial testing is necessitated by the labor-intensive consequences of comparing all titles; however, estimations from samples bias the results. The most common approach in previous studies has been to look at parts of the author catalog (Buckland, Hindle, & Walker, 1975). The problem with this approach has been that some libraries have partial catalogs and varying cataloging rules. Researchers can use added entries and cross-references and make allowances in the alphabetical distribution of titles to reduce inaccuracies; however, such allowances are not always considered. The size of the library and its mission can result in overestimation and underestimation of the overlap. The author catalog approach, however, is easy to understand and manipulate.

Altman (1972) studied 31 secondary school libraries in two New Jersey counties to determine if resource sharing was feasible among school libraries. Prior to her study it was assumed that school library collections were basically the

same in supporting the curriculum. She used another approach to study the collections and determined that 50% of the titles were unique. Twelve topics on which students had done independent research were identified by teachers and librarians. The classification scheme was the method used. A problem associated with this approach is the likelihood that titles are misclassified. Titles that should be in alternate classifications can be eliminated. However, titles not in the classification area used for study are harder to identify. This approach should be used with libraries using consistent classification schemes or when these schemes can be translated into a common form (Buckland et al., 1975).

Altman's (1972) study was one of the few that did not include research or academic libraries. It compared collections whose mission was patron usage with high frequency and intensity. She expected the school collections to be similar due to the curriculum support objective but found there was a large number of unique titles. Merritt (1942) expected research library collections to be varied but found there was a large amount of commonality in collections. When the results average 50%, however, the analysis of the data can be read either way.

Another overlap study investigating how a group of libraries might provide the books needed by patrons was that of McGrath and Simon (1972). They studied 14 academic

libraries, a public library, and the state library in Louisiana. The Library of Congress card numbers for each title cataloged in an 18-month period were compared. They found that the sample time frame was very brief, which may have skewed the results. However, the study did indicate that there was a significant number of unique titles, indicating the feasibility of resource sharing.

Doll (1984) concluded that the small amount of duplication among children's collections in two elementary schools and one public library in each of four Illinois communities indicated a cooperative effort would be valuable. When the school library collection was compared with a public library collection, there was about 50% overlap. There was less overlap between the two school libraries than there was between the school and the public library.

Merritt (1942), Altman (1972), McGrath and Simon (1972), and Doll (1983) found a significant number of unique titles in the collections studied. Since large individuality among collections is a supportive factor in determining the desirability of resource sharing, the findings in these studies establish potential for resource sharing as approximately 50% unique titles.

Implications for Centralized Processing

The direct statistical approach using random sampling raises questions. Is a title only listed once in the group being sampled? In the linear measurement of cards, is the

tension at which the cards are held per inch consistent, and is the thickness of the card stock the same? A sampling of a precise interval, even in a medium-sized library, can be unwieldy. Is excluding the materials not in the range of the study a consideration? Is identification of materials left out even more a consideration (Buckland et al., 1975)?

Studies that consider the implications of overlap to centralized processing usually have sampled acquisition or cataloging records. Copies of the cards for the books cataloged in a 2-week period in nine large university libraries were compared by Dawson (1957). The rationale for this study, and similar ones, is that if there is a large amount of overlap among libraries, then it may be more cost and time efficient to process materials centrally. Dawson suggested that over time libraries would probably acquire titles in common. The study, however, lacks substance as only a 2-week time period was used. Even though the methodology is weak, this study supports Merritt's (1942) theory that research libraries do acquire the same titles.

Nugent (1968) studied six New England state university libraries. Two samples from each of the six libraries consisting of 550 titles were used. The first sample compared the collection; the second studied the acquisitions for a 3-year period. Nugent's findings indicate a large overlap in the samples and support a rationale for centralized processing.

Leonard, Maier, and Dougherty (1969) studied nine academic libraries in Colorado to determine the feasibility of centralized processing. A 6-month cumulated index of the Book Publishing Record was used to establish a sample. Samples using an external list bias results. External lists of titles are not likely to include all possible titles in the study. Foreign and some domestic titles are unlikely to be included. Yet, implications for central processing are indicated, as the study found the average numbers of overlap titles were greater than unique titles.

Conflicting results were found by Urguhart and Schofield (1972). They studied 6 months of acquisitions from 49 of 59 University of London libraries. The results were biased as the time frame involved was short; yet findings were that not enough overlap existed to make centralized processing feasible.

Knightly (1975) found that by comparing 19 subject areas in the 1968 annual volume of the Book Publishing Record against the catalogs of 22 academic libraries in Texas, there were high numbers of overlap within collections. This comparison of the subject collections and the curriculum for the 22 libraries indicates that centralized processing could be helpful.

In a consideration of size among libraries and the overlap among public libraries, Davis and Shaw (1979) compared the collections of several American and Canadian public libraries. Titles with a copyright date earlier than

1970 were not included. The percentage of overlap was found to support considerations for cooperative central processing but not for resource sharing. This study concluded that collection size was important in determining the degree of overlap.

A random sample of the monographs in the Alberta Alcoholism and Drug Abuse Commission Library in Edmonton was compared among eight Canadian addiction libraries by Dingle-Cliff and Davis (1979). This study also sampled titles published after 1970. The significance of this study was not so much the overlap percentage found but rather that the size and type of library determines the number of titles held in common. This study indicated that collection overlap has implications for both resource sharing and cooperative centralized processing.

To determine the feasibility of a school system joining a bibliographic utility, Browne (1986) studied the purchase orders of four high schools in Georgia over a 3-year period. This study found a lack of sufficient overlap to make participation in a bibliographic utility cost effective but indicated cooperative resource sharing to be feasible.

The methodologies and data analyses for the studies differed among those investigating the implications for a union catalog and those for central processing. The studies for union catalog found there was little overlap among libraries, which is supportive of cooperation in resource sharing. The studies of the feasibility of centralized

processing by Nugent (1968), Leonard (1969), Knightly (1975), and Davis and Shaw (1979) found large amounts of overlap and implied a rationale for centralized processing.

Other studies examined the feasibility of cooperation within collection development practices. Cooper, Thompson, and Weeks (1975) gathered samples from catalogs at the University of California campuses at Berkeley and at Los Angeles. The Berkeley sample was compared with other campuses in northern California and UCLA. The UCLA sample was checked against campuses in southern California, as well. The findings indicated a large variance among these collections. When little overlap is found, it is not necessary to establish cooperative programs to ensure that there is a large number of unique titles when considering collection development practices. The California study found little overlap and therefore determined that cooperative collection development strategies to ensure a large variance in titles were not necessary.

Studies considering union catalogs by Merritt (1942), Altman (1972), McGrath and Simon (1972), and Doll (1983) found large numbers of unique titles. In addition, two other studies found collection overlap was small. Evans, Gifford, and Franz (1977) studied 12 weeks of cataloging from four New York state academic libraries. Even though the time limit skewed the results, the findings indicated that numbers of unique titles were large. Two years of cataloging records from 11 libraries in the University of

Wisconsin system were studied by Moore, Miller, and Tolliver (1982). They found large numbers of unique titles. The New York and Wisconsin studies, as well as that of McGrath and Simon (1972), examined large numbers of records. Each of the studies indicated that the overlap in collections is small.

Study of Overlap Methodologies

The last category of overlap studies Potter (1982) described was those works which provide a clearer understanding of overlap and diversity among collections. Buckland et al. (1975) reviewed various methodologies used in the research. This report identified advantages and disadvantages by comparing segments of the catalog, samples from external lists, using direct statistical approach, and by comparing acquisition records. It was explained that data collection and analysis in the area of collection overlap studies vary and make comparisons among overlap studies difficult. This investigation provides organization to previous studies and guidance for future ones.

Summary

To provide cost-efficient ways to look at shrinking budgets and expanding needs, this study investigated whether or not resource sharing can be supported by existing collections in the elementary schools of a particular school

system in which each school is supported with the Circulation Plus automated system. The utilization of automation to gather data needed for analysis provides an alternative method in research concerning overlap.

Automation has been used in other overlap studies. Potter (1986) used the Library Computer System computer network in Illinois. A procedure was used to match and merge the machine-readable data on the titles. Sanders, O'Neill, and Weibel (1988) found that automation allowed an alternative means in the labor-intensive process of comparing collections.

Studies concerning overlap numbers among collections have been primarily concerned with academic libraries. Those that have been related to schools have examined either secondary schools or elementary schools and their relationship with public libraries. This review did not find any studies that sought to determine the overlap numbers in only elementary schools and used automation as a tool of the methodology.

Previous studies have revealed that there is a large variance in methodology and reporting. Conclusions and comparisons for a rationale for resource sharing are difficult. The title diversity indicated by Altman (1972) and Doll (1984) in their studies seeking connections among school libraries with implications for a cooperative effort and Browne's (1986) study looking for a rationale for participation in a bibliographic utility show that resource

sharing is probably feasible. This study investigated the overlap in a segment of the classification in order to determine implications for resource sharing. Other studies indicate that overlap does occur, yet it is likely that there is enough uniqueness among title holdings to warrant resource sharing.

Research studies generally and especially those of Merritt (1942), Altman (1972), McGrath and Simon (1972), and Doll (1983) indicate that when 50% of the titles are unique implications for resource sharing exist. Resource sharing for each library is feasible when one-half or more of the titles in each library are different from other collections of participating libraries. This study investigated the practicality of resource sharing in selected elementary schools.

CHAPTER 3

METHODOLOGY AND PROCEDURES

The purpose of this study was to investigate descriptively the numbers of unique and overlap titles in selected elementary schools which may influence decision making toward resource sharing. Data from the 600.00 to 699.99 section of the Dewey Decimal Classification scheme were collected from 20 elementary schools in DeKalb County, Georgia. All of the schools use the Follett Software Company's Circulation Plus automated circulation software package. The title lists were produced electronically from the Circulation Plus system. The data were sorted to determine the numbers of unique and overlap titles.

Description of the Sample

A convenience sample was used based upon whether or not a school had completed the retrospective conversion process, had barcoded the materials, and had been using the Circulation Plus system for at least 1 year. Each Circulation Plus system was independent. There were no capabilities for networking electronically.

To determine if an average group of schools in a large metropolitan school system would be candidates for resource

sharing, schools were selected on the basis of three criteria: size, age, and racial composition. Schools with student populations between 400 and 750 were studied. Neither the largest (over 800 students) nor the smallest (200 students) were included. Schools ranged in age from 15 years to 35 years, and the newest school was 1 year old. The oldest schools in the system were not included. The racial composition included schools that were long-term black, predominantly white in 1978 and predominantly black in 1988, and long-term predominantly white.

The numbers of titles in each school's collection in the Dewey Decimal Classification section used in this study varied. The numerical figure related to the titles was not based upon student population. The 600.00 to 699.99 section supported instruction across the curriculum; however, the numbers of titles in the sample were not equal for each school.

The Applied Science (Technology) section of the Dewey Decimal Classification was selected because of its broad curriculum subject coverage. The Basic Curriculum Content for Georgia's Public Schools (Georgia Department of Education, 1985) specifies that the science curriculum include the demonstration of technology as a result of scientific endeavor, and its achievement is not without changes. This includes the study of simple machines and their basic principles and impact. It includes knowledge of the working

world and career opportunities. It includes the understanding of the human body and its functions, health practices, and nutrition, as well as drugs and their effects. The titles found in the 600.00 to 699.99 section are curriculum design components throughout each grade level.

Data Collection Procedures

The media specialist at each school was personally contacted to solicit permission and cooperation for data collection. Step-by-step instructions for data collection were sent through courier mail after the solicitation (see Appendix A). For those schools that were willing but unable to collect the data, the researcher visited the site to gather the data.

The titles were acquired in shelf-list order from each school. By selecting the "INVENTORY" option from the Main Menu, all the "MARKED TITLES" were obtained. The DeKalb County School System used a quarterly inventory schedule which permitted the marking of the 600.00 to 699.99 Dewey Decimal section prior to data collection for this study.

The printed lists of titles and call number/authors were coded into an ASCII file, and a school number field was added for identification. The machine-readable data were then manipulated so that the overlap and unique numbers of titles could be identified.

Data Analysis

The data were analyzed to determine the numbers and percentages of overlap and unique titles in the sample.

CHAPTER 4

RESULTS

The purpose of this study was to determine the numbers and percentages of unique and overlap titles in selected elementary school library media center collections using Circulation Plus, a Follett Software Company automation system, and to investigate if variances have implications for resource sharing. All of the titles in the 600.00 to 699.99 Dewey Decimal Classification section from seven schools, including unique and duplicate titles, were tabulated for this study.

A separate database was developed for each of the seven schools in the study. The databases included a truncated title and a call number/author for each book held in the collection. The total numbers and percentages of unique and overlap titles were calculated. The individual school files were also merged with the other school files according to call number by tens.

The sample size of the study was 3,333 books in the 600.00 to 699.99 Dewey Decimal section from the seven selected schools. Comparisons of overlap and unique titles by the oldest and newest schools, smallest and largest student populations, and smallest and largest library media

center collections were made. The demographic data for each school in the study are described in Table 1.

Table 1
Demographics of Schools

School Number	School Age in Years	Student Population	Book Collection Total	Racial Composition
School 1	35	624	8,109	Long-term Black
School 2	33	430	6,828	Long-term Black
School 3	30	504	7,500	White'78/Black'88
School 4	27	698	10,217	Long-term White
School 5	24	584	10,210	White'78/Black'88
School 6	15	524	8,135	Long-term White
School 7	1	736	9,750	Long-term White
Means:	23.6	585.7	8,678.43	

Table 2 indicates the numbers of titles and the number and percentages of unique and overlap titles in the schools studied. The findings presented in Table 2 indicate that 67% of the titles are unique and 33% are overlap.

The oldest schools, School 1 and School 2, had the smallest collections of the 600.00 to 699.99 Dewey Decimal Classification section. The oldest schools are additionally

Table 2
Numbers and Percentages of Titles Studied

School Number	Number of Titles	Unique Titles		Overlap Titles	
		No.	%	No.	%
School 1	364	225	62%	139	38%
School 2	332	204	62%	128	38%
School 3	374	246	66%	128	34%
School 4	652	412	63%	240	37%
School 5	413	247	60%	166	40%
School 6	402	208	52%	194	48%
School 7	796	690	87%	106	13%
Total	3,333	2,232	67%	1,101	33%
Means:	476.14	318.86		157.29	

characterized by having predominantly long-term black student populations.

The newest school, School 7, was unique in many ways. It had the largest percentage of unique titles (87%). The overlap found in the newest school was only 13%. The newest collection was also the largest collection. The percentage of titles in School 7 represented 24% of all the titles in the sample. The largest student population was represented in School 7. Excluding the data tabulated from School 7,

the overall percentage of unique titles drops from 67% to 61%. The extremes in age of the schools, oldest to newest, indicate that there are 25% more unique titles in the newest school (School 7).

Table 3 indicates the numbers and percentages of titles found in call numbers by tens.

Table 3
Numbers and Percentages by Call Numbers

Dewey Decimal Classification	Number of Titles	Unique Titles		Overlap Titles	
		No.	%	No.	%
600	49	24	49%	25	51%
610	764	498	65%	266	35%
620	1,179	826	70%	353	30%
630	770	489	64%	281	36%
640	302	230	76%	72	24%
650	61	39	64%	22	36%
660	56	32	57%	24	43%
670	57	33	58%	24	42%
680	69	42	61%	27	39%
690	26	19	73%	7	27%
Total	3,333	2,232	67%	1,101	33%

No one title was found in all seven collections. The only title that was a part of as many as six collections was Straight Hair, Curly Hair, by Augusta R. Goldin, published by Crowell of New York in 1966. There were only 6 titles found in five schools and 18 titles found in four schools. The 610 Dewey Decimal Classification section had the most titles (three) overlap in five schools. The 630 section had the most titles (seven) overlap in four schools.

Review of books classified in the 640 Dewey Decimal Classification section, Domestic Arts and Sciences (i.e., cookbooks, books about sewing, etc.), showed that 76% of the titles were unique with only 24% overlap. Those books classified in the 620s, Engineering and Allied Operations (i.e., books about space travel, sports cars, and machinery), were 70% unique titles and 30% overlap. Books in the 610s, Medical Sciences (i.e., books about drugs, AIDS, and other health-related issues), were largely unique (65%). The entire Technology (applied science) sections, 600.00 to 699.99, of the seven elementary school library media centers were largely unique.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

The purpose of this study was to investigate the numbers and percentages of unique and overlap book titles in selected elementary schools as a possible basis for resource sharing decision making. All the titles in the 600.00 to 699.99 Dewey Decimal Classification section from seven DeKalb County schools using Circulation Plus, a Follett Software Company automation system, were tabulated and compared.

Interpretation of Findings

A sample size of 3,333 books was investigated. The findings indicated that 67% of the titles were unique and 33% overlap. The percentage of unique titles changed to 61% when the newest school was excluded. In each instance, the numbers of unique titles were large enough to indicate resource sharing feasibility.

Other studies investigating overlap titles in school collections have determined that many titles are unique. Doll in 1983 found approximately 75% unique titles. Browne in 1986 found over a 3-year period that new titles added were 89.1% unique. Browne's findings correlated to the

percentage of unique titles in the newest school (School 7) in this study, which was 87%. Based on the numbers of unique titles found by Merritt (1942), Altman (1972), McGrath and Simon (1972), Doll (1983), and in this study, school systems can utilize title uniqueness of library media center collections to justify resource sharing.

Implications

The numbers and percentages of unique book titles in the selected elementary library media collections establish substantial diversity of materials. The 67% unique datum indicates that there are sufficient numbers of resources which, if shared, could benefit the system's population.

The 600 Dewey Decimal Classification section is used throughout the curriculum. Resource sharing is unlikely to interrupt or deplete any single resource-based unit but could increase the numbers of resources available to such a unit (i.e., benefits would be informationally cost effective).

As students have different topics to research, it is economically possible for collection development to become specialized in specific subject areas. Through mutual planning among participating schools, concentration on a specific subject area of collection development could be realized. The creation of specialized library media center collections throughout the school system in a diverse resource-sharing network could benefit all populations.

Applications

The funding for materials in the DeKalb County Schools is directly related to numbers of pupils per school population. However, purchasing procedures and/or purchasing authorities (i.e., media specialists and media committees) have bearing on title diversity. Further study could determine experience, educational levels, and recency of education related to purchasing procedures and/or authorities and determine consequences that affect collection development.

The curriculum is centralized throughout the DeKalb County Schools. Further study could indicate centralized purchasing feasibility to reduce collection diversity. If standardization is a stated goal, core collections, publication of a standard list of possible selection choices, and a county-level committee can create more overlap. System offerings would be more uniform to students in this case. The philosophy of the DeKalb County selection policy is, however, that each selection agent or purchasing authority develop collections unique to the specific needs of the school population. Further study could evaluate the desirability of standardizing collection development or funding resource sharing.

Copyright dates were not investigated in this study. Would such an investigation indicate additional differences among collections? The Southern Association of Colleges and Schools (SACS) requires that the ratio between students and books in the library media center collections be of a

certain size. Out-of-date books often are not discarded due to the necessity of sustaining required numbers of titles.

Investigation of variables such as collection age and media specialist's selection expertise is possible in further study. The classification scheme and age level of materials should be equivalent. Study to determine if collections are more similar by using other Dewey Decimal Classification sections, fiction, and audiovisual materials could bring more information to decision making concerning resource sharing.

Conclusion

The diversity of the collections used in this study indicates cause for investigation of resource-sharing methods. There is inconsistency in collection development, as indicated by diversity among the numbers of unique and overlap titles found. To determine the best ways to create policies and techniques to utilize resources are some of the challenges ahead.

Automation and networking will become more typical in school media centers. Limited resources for new technology will make collection development more challenging. Meeting the informational needs of students should be the primary objective. Resource sharing can make it possible to provide individual school populations with the volume of materials available, while also providing impetus to develop the technology to access them. The findings of Potter (1986),

Altman (1972), Doll (1983), McGrath and Simon (1972), Browne (1986), and this comparison of collections indicate that the uniqueness of collections creates opportunities for the sharing of resources and processes for facilitating that sharing.

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APPENDIX

Instructions for Data Collection

Instructions for selecting the 600.00-699.99 Dewey Decimal section of the collection from Circulation Plus are below. Your cooperation in gathering this sample for overlap study is greatly appreciated.

1. Select #6, Inventory, from the options listed on the Main Menu.
2. Select #4, Inventory Print Options, from the options listed on the Inventory Screen.
3. Select #1, Print by Call #/Author, from the options listed on the Print Inventory Screen.
4. Select #1, Marked Books by Call #/Author, from the Print Call #/Author Screen.
5. Read Message: "Search by Call #/Author"
"Enter Call #/Author Range: ____-____"
6. Type: 600.00 <RETURN>
699.99 <RETURN>
7. Read Message: "Turn on Printer and Set Paper at TOP OF FORM. Press <RETURN> when ready."
8. Press return and wait for printing to complete.
9. Mail the printed 600.00-699.99 shelf list in the enclosed courier envelope to Pam Kugel, Wadsworth.
10. Accept my sincere thanks for your cooperation.